

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/051726

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G01N33/569

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, BIOSIS, EMBASE, Sequence Search, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FOSTER B. AND PRUSSMAN C.: "Detection of Intracellular Cytokines by Flow Cytometry" 2002, JOHN WILEY & SONS, INC.: "CURRENT PROTOCOLS IN IMMUNOLOGY", NEW YORK 027902, XP002285462 page 6.24.1 - page 6.24.7 -----	1-17
X	AMICOSANTE MASSIMO ET AL: "Computer-based design of an HLA-haplotype and HIV-clade independent cytotoxic T-lymphocyte (CTL) assay for monitoring HIV-specific immunity." MOLECULAR MEDICINE (BALTIMORE), vol. 8, no. 12, December 2002 (2002-12), pages 798-807, XP002285458 ISSN: 1076-1551 the whole document page 802, column 1; table 2 ----- -/-	1-19,24, 27,28, 40,41, 58,61, 64,67,68

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

13 December 2004

Date of mailing of the international search report

03. 05. 2005

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PCT/EP2004/051726

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>MAECKER H T ET AL: "Use of overlapping peptide mixtures as antigens for cytokine flow cytometry" JOURNAL OF IMMUNOLOGICAL METHODS, ELSEVIER SCIENCE PUBLISHERS B.V.,AMSTERDAM, NL, vol. 255, no. 1-2, 1 September 2001 (2001-09-01), pages 27-40, XP004274819 ISSN: 0022-1759 the whole document</p>	<p>1-19,27, 28,40, 41,58, 61,64, 67,68</p>
X	<p>----- BETTS MICHAEL R ET AL: "Monitoring HIV-specific CD8+ T cell responses by intracellular cytokine production" IMMUNOLOGY LETTERS, vol. 79, no. 1-2, 1 November 2001 (2001-11-01), pages 117-125, XP002285459 ISSN: 0165-2478 the whole document</p>	<p>1-17</p>
X	<p>----- GOULDER PHILIP J R ET AL: "Rapid definition of five novel HLA-A*3002-restricted human immunodeficiency virus-specific cytotoxic T-lymphocyte epitopes by Elispot and intracellular cytokine staining assays" JOURNAL OF VIROLOGY, vol. 75, no. 3, February 2001 (2001-02), pages 1339-1347, XP002285460 ISSN: 0022-538X the whole document</p>	<p>1-17</p>
X	<p>----- YU XU G ET AL: "Important contribution of p15 Gag-specific responses to the total Gag-specific CTL responses" AIDS (HAGERSTOWN), vol. 16, no. 3, 15 February 2002 (2002-02-15), pages 321-328, XP002285461 ISSN: 0269-9370 the whole document</p>	<p>1-17</p>
X	<p>----- WO 03/015702 A (GEN HOSPITAL CORP ; ALTFELD MARCUS (US); WALKER BRUCE D (US)) 27 February 2003 (2003-02-27)</p> <p>page 5 page 9, paragraph 3 page 11 - page 13 page 9 sequence 6 figures 3-5</p> <p>----- -/--</p>	<p>1-19,27, 28,40, 41,58, 61,64, 67,68</p>

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International Application No  
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DREXLER I ET AL: "Identification of vaccinia virus epitope-specific HLA-A*0201-restricted T cells and comparative analysis of smallpox vaccines" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 100, no. 1, 7 January 2003 (2003-01-07), pages 217-222, XP002232973 ISSN: 0027-8424 the whole document	19-21, 24-26, 44-46, 67,69
X	----- TERAJIMA MASANORI ET AL: "Quantitation of CD8+ T cell responses to newly identified HLA-A*0201-restricted T cell epitopes conserved among vaccinia and variola (smallpox) viruses" JOURNAL OF EXPERIMENTAL MEDICINE, TOKYO, JP, vol. 197, no. 7, 7 April 2003 (2003-04-07), pages 927-932, XP002292276 ISSN: 0022-1007 the whole document	19-21, 24-26, 44-46, 67,69
T	----- WO 2004/067032 A (TERAJIMA MASANORI ; UNIV MASSACHUSETTS MEDICAL CT (US); CRUZ JOHN (US)) 12 August 2004 (2004-08-12) the whole document	19-21, 24-26, 44-46, 67,69
P,X	----- EP 1 398 380 A (GSF FORSCHUNGSZENTRUM UMWELT) 17 March 2004 (2004-03-17) the whole document	19-21, 24-26, 44-46, 67,69
P,X	----- WO 2004/024756 A (SUTTER GERD ; DREXLER INGO (DE); ERFLE VOLKER (DE); STAIB CAROLINE (DE) 25 March 2004 (2004-03-25) the whole document	19-21, 24-26, 44-46, 67,69

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Inventions 1-20: claims 1-21,23-26, 44-46, 58, 67, 69 (in part)

Variola and derived peptides  
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Invention 21: Claims 1-21,23-26, 42-43, 46, 58, 67,69 (in part)

Bacillus Anthracis and derived peptides  
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Invention 22: Claims 1-21, 23-24, 26, 58, 65, 67,69 (in part)

Yersinia pestis and derived peptides  
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Invention 23: Claims 1-21, 23-24, 26, 58, 65, 67,69 (in part)

Francisella tularensis and derived peptides  
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Invention 24: Claims 1-21, 23-26, 31-41, 46, 58-59, 67-69 (in part)

SARS and derived peptides  
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Invention 25: Claims 1-21,23-26, 58, 67,69 (in part)

human non-SARS Coronavirus  
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Inventions 26-45: Claims 1-19, 27-28, 40-41, 58, 61, 64, 67-68 (in part)

HIV and derived peptides  
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Invention 46: 1-19, 29-30, 40-41, 58, 62, 63, 67-68, 72-73 (in part)

CMV and derived peptides  
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Invention 47: Claims 1-19, 26, 47, 58, 60, 67 (in part)

enteric infections and derived peptides  
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Invention 48: Claims 1-19, 26, 48-58, 66-67, 70-71

Tumour antigens and derived peptides  
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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Invention 49: Claims 1-19, 26, 58-59 (in part)

respiratory infections, except SARS

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Invention 50: Claims 1-19, 26, 58, 61 (in part)

sexually transmitted diseases, except HIV

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Invention 51: Claims 1-19, 26, 58, 62, 72 (in part)

in utero infections, except post transplant infections and  
CMV

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Invention 52: Claims 1-19, 26, 58, 63, 73 (in part)

post transplant infections except CMV

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Invention 53: Claims 1-19, 26, 58, 64 (in part)

blood-borne diseases, except sexually transmitted diseases  
and HIV

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Invention 54: Claims 1-19, 22, 26, 58 (in part)

bacterial toxins

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/051726

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03015702	A	27-02-2003	WO 03015702 A2 US 2003219450 A1	27-02-2003 27-11-2003
WO 2004067032	A	12-08-2004	WO 2004067032 A2	12-08-2004
EP 1398380	A	17-03-2004	DE 10242318 A1 AU 2003267361 A1 WO 2004024756 A2 EP 1398380 A1	18-03-2004 30-04-2004 25-03-2004 17-03-2004
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